



Fast Facts

CALIFORNIA DEPARTMENT OF HEALTH SERVICES

PS3

CONTROLLING TUBERCULOSIS IN CALIFORNIA

What is Tuberculosis (TB)?

Tuberculosis (TB) is a contagious disease that is transmitted through the air from one person to another by tiny infectious airborne particles expelled when a person with TB disease coughs or talks. Anyone inhaling the air containing these particles may become infected.

- **TB infection** - In most people, the immune system keeps the TB bacteria in check, so the person does not feel sick and cannot spread TB to others. If untreated, the latent TB bacteria can become active and cause TB disease.
- **TB disease** - If active TB disease develops, TB bacteria attack the lungs or other parts of the body. It usually takes 6 months to cure, so the patient doesn't die or spread TB to others. Multi drug-resistant TB (MDR-TB) - active TB caused by bacteria resistant to our most powerful drugs - is much more difficult and costly to treat and can be incurable.

Why TB Made a 'Comeback' - 1985-92

TB made a dramatic resurgence in California in the late 1980s with the number of new TB cases rising 54 percent from 1985 to 1992. This reversal of decades of declining TB cases occurred because the public health infrastructure was inadequate to contain the factors fueling the TB epidemic. These factors included increased immigration from high TB incidence countries, homelessness, incarceration, and the appearance of the strongest risk factor for TB ever identified - the human immunodeficiency virus (HIV).

Intensified Efforts are Bringing the TB Epidemic Under Control

In 1999, a total of 3,608 cases of TB disease were recorded in California, marking the seventh consecutive annual decline since the peak of the resurgence in 1992. The 33 percent decline in TB cases since 1992 reflects major accomplishments in the fight against TB in California.

Two governor's initiatives and increased federal support have strengthened the California TB control infrastructure and helped implement the 1995 *Strategic Plan for TB Control and Elimination in California*. DHS currently receives \$9.6 million in General Funds and \$8 million in federal Centers for Disease Control funds. Of this budget, 35 percent supports the state TB control program and laboratory. The remaining 65

percent supports over 200 public health nurses, disease investigators, and outreach workers in 44 local health department TB control programs. The first priority of the *Strategic Plan* is to ensure that patients with TB are cured so they can't spread TB nor develop and spread drug-resistant TB. To do this, public health workers observe patients taking each dose of medication (directly observed therapy).

Remaining Challenges

Despite recent declines in TB, California has the highest number and the second highest rate of TB cases in the United States:

- Major gaps in TB rates persist among different racial and ethnic groups. TB rates among California's Asians, African Americans and Latinos are 5 to 14 times higher than for non-Hispanic whites.
- Seventy percent of TB cases are in persons born outside of the U.S., which illustrates the impact of the global TB epidemic on California. Of the foreign born cases, 33 percent are from Mexico, 19 percent are from the Philippines, and 14 percent are from Vietnam.
- Fifteen percent of TB cases are resistant to at least one TB medication, and one to two percent are MDR-TB.
- Hotspots of TB transmission continue to occur, such as recent outbreaks in a prison, a drug-using inner city community, and a rural American-Indian community.

Next Steps

Curing TB cases is a necessary first step and must be sustained. DHS must ensure that the estimated 30,000 Californians in contact with infectious TB cases each year are identified, evaluated, and treated. However, finding and treating cases and their contacts is insufficient. To eliminate TB, DHS must move to the next step in its *Strategic Plan*: targeting tuberculin skin testing to identify TB infection and providing treatment to those infected. High-risk groups include recently infected persons, those with HIV co-infection, and recent immigrants. Overall, it is estimated that one out of every ten Californians (3.4 million) is infected with TB. If untreated, each of these 3.4 million persons has, on average, a five percent risk of progression to active TB, yielding approximately 3,000 active TB cases per year for the next 60 years. These future cases can in turn spread TB to others.

Additional next steps include:

- Strengthening the working ties between health departments and correctional facilities, managed care and other providers, and TB programs in Mexico.

- Improving detection and follow-up of immigrants suspected of having TB at the time they were screened overseas.
- Expanding housing and detention capacity so homeless or recalcitrant TB patients can complete their treatment.
- Implementing performance indicators to improve accountability.
- Halting and preventing TB transmission in institutions and communities.